

OVERLAY PLAN GUIDELINES & IMPLEMENTATION

CHAPTER THREE

The vision for the park, as well as the principles of partnership, sustainability, accessibility, connectivity, and conservation were fundamental to the conceptual design of the Master Plan Overlay. It is critical for the success of the plan to formalize development guidelines based on those principles in order to direct the design and implementation of park projects. Adherence to these guidelines ensures a holistic perspective when envisioning the park's future, continuity in project implementation, and most importantly, a commitment to the plan vision and goals.

IMPLEMENTATION GUIDELINE

Developing a unique park that meets the needs of the community requires a well-managed implementation process. The following actions are suggested by this plan:

- Establish a subset of the existing Parks and Recreation Commission to perform ongoing oversight of implementation of the master plan elements through thorough review to ensure adherence to its goals and objectives.
- Implement a clear and logical approval process for development of the park and for addressing proposed changes.
- Maintain an open and inclusive process for implementation of the master plan that encourages participation by citizens, city departments, elected officials, and other appropriate groups.

PARTNERSHIP GUIDELINE

Developing and maintaining Shaw Park requires a collaborative effort built upon solid partnerships. The following actions are suggested by this plan:

- Continue to encourage partnerships between the Clayton Century Foundation, the City, and private entities to support implementation projects and the park's daily operations and long term maintenance.
- Support the Clayton Century Foundation in their efforts to lead and foster public/private partnerships.
- Foster a sense of ownership and pride while encouraging a shared responsibility for the park from all stakeholders.

MANAGEMENT AND MAINTENANCE GUIDELINE

Meeting the recreational needs and enhancing the well-being of Shaw Park users will require comprehensive and sustainable management. The following actions are suggested by this plan:

- Modify existing maintenance practices to promote sustainable, ecologically sound park amenities and landscape systems and reduce long term maintenance requirements.
- Private support and supplemental funding should be pursued to bolster the budget for short and long term maintenance needs of the park.
- Develop management structures that supports the levels of use and necessary maintenance of the desired park assets.

ACCESSIBILITY AND CONNECTIVITY GUIDELINE

Management of the park as a community asset for all citizens of Clayton requires a balanced approach for adequate access, connectivity, and park development. The following actions are suggested by this plan:

- Ensure that park open spaces and amenities are accessible to all users.
- Balance the need for automobile parking and access with the quality and quantity of park amenities.
- Address the needs of pedestrian park users and circulation over the needs of automobiles.
- Encourage development of amenities within the park that promote pedestrian access from the urban core of the City and link the park to neighborhoods, regional parks, and greenways.

SUSTAINABILITY GUIDELINE

Sustainable development and management practices are necessary for long term success of the park. The following actions are suggested by this plan:

- Continually evaluate development impacts on grey and green infrastructure and ecosystem services to promote a sound and balanced park environment.
- Protect storm-water and the urban forest from pollutants and degradation with comprehensive plans for conservation.
- Encourage the development of dedicated funding resources to ensure adequate long-term maintenance and conservation of park infrastructure.

LAND USE GUIDELINE

The current balance between passive and active spaces in Shaw Park is appropriate and should be maintained. A conservation approach should be taken when new development occurs within the park. The following actions are suggested by this plan:

- Ensure open space is preserved for passive recreation.
- Enhance passive spaces with a diversity of landscape typologies to immerse park users in the environment and educate users about the value of park land.
- Enhance active recreation spaces while minimizing burden on passive spaces by ensuring park facilities support multiple uses.

ART, ARCHITECTURE, AND LANDSCAPE GUIDELINE

The distinctive style of Clayton plays an important role in the character of Shaw Park. Maintaining the style and sense of place are critical to the success of the park. The following actions are suggested by this plan:

- Encourage that all development, including amenities, infrastructure, art, architecture, and landscapes, be compatible with the distinctive style and character of the park and City.
- Incorporate art and sculpture into the park whenever possible.
- Encourage the use of sustainable practices in the development of park amenities and landscapes to demonstrate the City’s position as a regional leader in sustainable development.

Future Shaw Park improvement projects should be thoroughly vetted as they progress through the design process into construction. A subset of the Parks and Recreation Commission should be tasked with the future evaluation of such projects. The guidelines above can provide a “lens” through which each project is assessed. As it may be difficult to ensure all guidelines apply to all projects, the following matrix can help direct the commissioners to focus their attention more intently on the guidelines which are most critical to project success.

PROJECT / GUIDELINE MATRIX		GUIDELINES TO FOCUS ON						
		Implementation	Partnership	Management and Maintenance	Accessibility and Connectivity	Sustainability	Land Use	Art, Architecture, Landscape
POTENTIAL PROJECTS	Brentwood & Forsyth	1	1	1	2	2	2	3
	Multi-Purpose Facility	1	1	1	2	2	3	3
	Century Garden	1	1	1	2	1	3	3
	Promenade & Strolling Garden	1	1	1	1	2	2	3
	Stream and Lower Pond	1	1	1	2	3	2	3
	South Parking and Picnic Hill	1	2	1	1	2	2	3
	Park Edge Improvements	1	2	1	1	3	3	3
	The Link	1	1	1	2	2	3	3

Prioritization of Guidelines

1. Intense Focus
2. Moderate Focus
3. Minimal Focus

IMPLEMENTATION

Many factors can impact the ultimate success of the Shaw Park Master Plan Overlay. Strategies for implementation are some of the most critical. While a strong vision, meaningful goals, and a policy framework lay a foundation for a plan, only a clear and realistic strategy for implementation can bring it to fruition. To this end, project phasing and funding are the two most critical elements in the implementation strategy.

FUNDING FOR MANAGEMENT AND MAINTENANCE

Maintenance expenses in for the elements developed in the Shaw Park Master Plan Overlay are estimated at \$800,000 annually. Given the current annual budget for Shaw Park maintenance of \$513,000 to \$550,000, private support and supplemental funding should be pursued to bolster parks maintenance.

It is understood that the current standards of care in the park will need to be upgraded in order to reflect the quality and detail of the proposed plan elements. This upgrade should occur at the time of any initial installation or park development.

The quality of landscapes, amenities, and historic structures within Shaw Park currently require a moderate amount of maintenance. The City regularly mows, maintains the infrastructure, removes trash, maintains annual plantings, maintains the sensory garden, and performs tree maintenance in the park. This existing, moderate level of care will need to broaden.

Because of the complexity of the overlay plan for Shaw Park, its amenities, and its users, it is suggested that the intensity of maintenance be varied within the park. High-use and high-visibility areas should receive a higher intensity of care. While other areas of the park, less visible and less frequently utilized, require less intense maintenance practices. Balancing intensity of maintenance or “modes of care” can help focus time and labor where it is needed most in the park. Ultimately this translates into reduced maintenance budgets.

This plan suggests that “modes of care” be developed in the following manner:

Mode One - Intense Care

- Formal Gardens
- Park Edges
- Plazas/Gathering Spaces, Pavilions, Park Entries
- Tennis Center
- Ball Fields
- Ice Rink
- Pool
- Playgrounds
- Sensory Garden
- Sculpture Garden
- Fitness Area
- Water Features

Mode Two – Moderate/Low Care

- Park Trails
- Lawn Areas
- Passive Recreation Areas
- Native Understory Areas
- Urban Forest
- Storm Water Management Facilities
- Parking Areas

Supplemental support for successful long-term landscape maintenance can come in several forms including volunteerism, outsourcing, establishment maintenance, and funding endowments.

Volunteers could be utilized to help fill a critical gap in maintenance practices in the park. They could address more mundane issues in the park leaving more involved maintenance practices for staff professionals. An organized group of volunteers, like the “Flora Conservancy” in Forest Park, can make a big impact on the Park. This type of organization would need strong leadership by the City Parks Department in order to work toward the common goals of the City and the Master Plan Overlay.

Outsourcing of maintenance should be considered if higher, or more skilled levels of maintenance are desired. The proposed north end of the park and the Century Garden improvements could benefit from this type of focused attention as they are highly visible portions of the park and may be often used for formal gatherings.

Establishment maintenance is the continued maintenance by the landscape installer during the a “grow-in” period for newly installed landscapes. Contracts with the installer should be required on all proposed landscapes, especially in the native areas and nature garden. This will help ensure proper establishment of these landscapes, require contractors to guarantee their installations for an extended period of time, and make future maintenance easier and more successful.

Endowment funds for park and facility maintenance should be sought as fundraising is occurring for capital park improvements. This type of long-term funding resource is critical to the enduring success of the park and has worked successfully for other public parks, including Forest Park.

As the master plan is implemented and the park maintenance needs grow and change, further analysis of maintenance costs, modes of care, and maintenance methodology will be necessary in order to best address the longevity of the park.

FUNDING FOR CAPITAL COSTS

Private-Public Partnerships and Fundraising

The private-public partnership that has been forged by the Clayton Century Foundation (CCF) and the City of Clayton has already set a fund raising precedent for Shaw Park. Several successful projects have come to fruition because of the hard work and cooperation of the City and the CCF.

The CCF’s fundamental goal is to assist the City in accomplishing its mission: to foster a vital, balanced community composed of outstanding neighborhoods, quality businesses, commercial and government centers, premier educational institutions, and a healthy natural environment through an open, accessible and fiscally responsible government. The improvements outlined within this master plan meet the missions of both the City and the CCF to enhance and support environmental, cultural, and wellness activities affecting the quality of life of citizens of the Clayton.

The continuing partnership of the City and the CCF is critical to the success of the plan. Support from the City and a financial commitment from the CCF will be required in order for the plan to succeed. The financial commitment provided by the CCF may best come in the form of a capital campaign directly tied to the Master Plan Overlay. Funds raised should cover the costs related to capital park improvements, as well as an endowment for maintenance in perpetuity of the park.

Grants

Although private-public partnerships have been fruitful for the City, it is important to diversify funding sources. Many alternate funding opportunities are available and should be considered as resources for improvements and long term maintenance for the park.

Municipal Parks Grants: The 2013 passage of Proposition P ensures there will be continued funding from St. Louis County and the Municipal Park Grant Commission in the form of “Muni Grants”. The Commission will award approximately \$6 million annually for improvements in municipal parks. The City of Clayton has successfully applied for Commission funds in the past and expects continued opportunities to be available. Municipal Park Grant Commission funds can be utilized for planning and construction projects.

LWCF Grants: Land and Water Conservation Fund grants are available to cities, counties and school districts to be used for outdoor recreation projects. Projects require a 50 percent match. All funded project sites are taken under perpetuity by the National Park Service and must only be used for outdoor recreational purposes. Development and renovation projects must be maintained for a period of 25 years or the life of the manufactured goods.

TRIM Grants: The TRIM (Tree Resource Improvement and Maintenance) program is a competitive, cost-share tree care program administered by the Missouri Department of Conservation in cooperation with the Missouri Community Forest Council. The program provides reimbursement of \$1,000 to \$10,000 to assist government agencies, public schools and non-profit groups with management, improvement, and conservation of trees on public lands. Dependent on budget approval, the Department of Conservation may be able to offer from one to three \$25,000 maximum grants that prioritize collection of data and creation of management plans. Projects eligible for TRIM funding include tree inventory, removal or pruning of hazardous trees, tree planting, and training of volunteers and city/county employees to best care for our community forests.

Activity/User Fees

The City should establish dedicated user fees for the purpose of constructing and maintaining the new facilities and potential programs that will arise from the Shaw Park Overlay Master Plan. This type of fee would apply to all organized activities that require a paid registration or reservation of some type. Fees can be based on activity level. For example, in sports leagues each participant may be charged \$1.45 per scheduled game with \$1.00 going to offset operating and maintenance costs and \$0.45 for construction or renovation of facilities. The fees that users pay can be earmarked for facilities that generate the revenue.

Private Concessionaires

The City could utilize contracts with private businesses to provide and operate desirable recreational activities. These facilities and activities could be financed, constructed and operated by the private sector with additional compensation paid to the City for leases, long-term maintenance, and upkeep. From food vending kiosks to a restaurant in the park, private concessionaires could help the City diversify its recreational offerings and amenities without overburdening the City's limited budgets.

PHASING AND OPINIONS OF PROBABLE COST

Upon completion of the planning process for Shaw Park, a list of priorities was developed to assist the City and their partners in their implementation of the Overlay Master Plan. It should be understood that this plan is a long-range document. Over time priorities may change and opportunities may arise for implementation of projects that are not currently identified as priorities. Therefore, the following recommendations are intended as a starting point for implementation, while providing the flexibility for change if necessary.

Priority Projects:

- Brentwood and Forsyth
- Century Garden
- Multi-Purpose Facility

Potential Projects:

- General Landscape and Stormwater Management
- The Link
- Native Hillside Landscapes
- Park Edge Improvements
- Pond Amenities
- Promenade and Strolling Garden
- South Parking and Picnic Hill
- Stream and Lower Pond

It is also important that the recommendations in this Overlay Master Plan be evaluated and implemented as funding becomes available and as needs dictate.

The plan is intended to identify opportunities for improvements to current facilities and the development of new amenities, in order to meet the needs and desires of residents. The priorities listed below are based upon discussion with staff, the steering committee, and feedback received during the planning process. Improvements are divided into two categories; primary projects and potential projects. The projects were placed in one of these two categories based on the amount of feedback received, viability for implementation, and recreational value to the community.

The facing page depicts the phasing strategy developed by the steering committee, staff, and design team. The three priority projects identified (Area A, Area B, and Area C) have been approved for preliminary development by the Board of Alderman and are considered to be viable and beneficial for the park. A summary of the opinions of probable cost, including allowances for maintenance of priority projects and potential projects is also listed. Detailed opinions of probable cost for all projects follow.



Initial Phasing and Implementation Diagram

Area A - Brentwood and Forsyth
 Construction - \$2,900,000 - \$3,300,000
 Maintenance - \$90,000 - \$115,500

Area B - Century Garden
 Construction - \$1,300,000 - \$1,500,000
 Maintenance - \$40,000 - \$55,000

Area C* - Multi-Purpose Facility
 Construction - \$11,400,000 - \$13,400,000
 Maintenance - \$350,000 - \$500,000

Potential Additional Projects

General Landscape / Stormwater Management
 Construction - \$700,000 - \$900,000
 Maintenance - \$18,000 - \$30,000

The Link
 Construction - \$900,000 - \$1,100,000
 Maintenance - \$18,000 - \$28,000

Native Hillside Landscapes
 Construction - \$300,000 - \$400,000
 Maintenance - \$6,000 - \$10,000

Park Edge Improvements
 Construction - \$950,000 - \$1,200,000
 Maintenance - \$19,000 - \$30,000

Pond Amenities
 Construction - \$600,000 - \$900,000
 Maintenance - \$15,000 - \$25,000

Promenade and Strolling Garden
 Construction - \$900,000 - \$1,200,000
 Maintenance - \$30,000 - \$40,000

South Parking and Picnic Hill
 Construction - \$450,000 - \$550,000
 Maintenance - \$9,000 - \$14,000

Stream & Lower Pond
 Construction - \$3,200,000 - \$3,500,000
 Maintenance - \$95,000 - \$130,000

Construction Grand Total = \$24,300,000 - \$28,450,000

Annual Maintenance Total = \$700,000 - \$987,000**

* Costs include Multi-Use Facility estimate from Jacobs.

** Maintenance cost based on 2 - 5% of construction budget.

Area 'A' - Brentwood and Forsyth Entry Invitation

1 Demolition and Earthwork

Item	Quantity	Unit	Unit Cost	Subtotal
General Demolition / Site Clearing / Site Prep	1	al	\$25,000.00	\$25,000.00
General Grading / Earthwork	1	al	\$15,000.00	\$15,000.00
			Subtotal	\$40,000.00

2 Landscape

Canopy Trees	8	3' Cal	\$300.00	\$2,400.00
Flowering Trees	13	2' Cal	\$200.00	\$2,600.00
Shrubs	100	ea	\$60.00	\$6,000.00
Aquatic Plantings	1,200	sf	\$4.50	\$5,400.00
Planting Area (Perennials, Amended Topsoil, and Mulch)	10,500	sf	\$5.50	\$57,750.00
Native Seed With Erosion Control	3,500	sy	\$9.25	\$32,375.00
Turf Seed With Erosion Control	6,444	sy	\$1.25	\$8,055.56
			Subtotal	\$114,580.56

3 Hardscape

Concrete Walks (6' wide)	4,550	sf	\$5.00	\$22,750.00
Special Paving in Plaza	2,700	sf	\$14.00	\$37,800.00
Pavilion Paving (standard 6" scored concrete)	1,000	sf	\$6.00	\$6,000.00
Concrete Bench Pads	1,100	sf	\$5.00	\$5,500.00
Concrete Stairs	660	lf	\$25.00	\$16,500.00
Railings	1	al	\$10,000.00	\$10,000.00
Trail (8' Wide Asphalt Replacement Section)	350	lf	\$18.00	\$6,300.00
Curb and ADA Crosswalk Enhancements	1	al	\$10,000.00	\$10,000.00
Landscape Boulders	100	ea	\$175.00	\$17,500.00
Boulder Wall at Trail (18" Course)	140	lf	\$75.00	\$10,500.00
Stone Veneer Seat Wall 2' Ht	115	lf	\$353.00	\$40,595.00
Lake Edge Stone Block Seating (18" x18")	215	lf	\$225.00	\$48,375.00
Ballustrade at Pavilion	50	lf	\$380.00	\$19,000.00
Retaining Wall (avg. 6' ht.)	420	lf	\$517.00	\$217,140.00
			Subtotal	\$467,960.00

4 Site Amenities

Upper Plaza Fountain	1	al	\$177,928.00	\$177,928.00
Upper Plaza Fountain Mechanical	1	al	\$250,000.00	\$250,000.00
Cascade Feature and Pond	1	al	\$331,050.00	\$331,050.00
Cascade Feature and Pond Mechanical	1	al	\$85,000.00	\$85,000.00
Pond Grading and Liner	1	al	\$60,000.00	\$60,000.00
Pond Fountain and Aerator	1	al	\$10,000.00	\$10,000.00
Pergola	1	al	\$35,000.00	\$35,000.00
Pavilion	1	al	\$50,000.00	\$50,000.00
Bridge Feature	1	al	\$26,000.00	\$26,000.00
Stream Crossings	2	ea	\$10,000.00	\$20,000.00
Seating Overlooks	2	al	\$9,000.00	\$18,000.00
Fishing Outcrop	1	ea	\$8,000.00	\$8,000.00
Fishing Pier	1	al	\$10,000.00	\$10,000.00
			Subtotal	\$1,080,978.00

5 Utilities / Infrastructure

Forebay	1	al	\$30,000.00	\$30,000.00
Electrical Service	1	al	\$55,000.00	\$55,000.00
Electrical Distribution	1	al	\$20,000.00	\$20,000.00
Water Service Connection	1	al	\$5,000.00	\$5,000.00
Drinking Fountain at Pavilion	1	al	\$7,500.00	\$7,500.00
15" Storm Sewer Extension	1	al	\$13,000.00	\$13,000.00
21" Sanitary Sewer Relocation	1	al	\$33,000.00	\$33,000.00
42" Storm Sewer Relocation	1	al	\$68,000.00	\$68,000.00
			Subtotal	\$231,500.00

6 Miscellaneous

Site Furniture (Benches, Tables, Trash Receptacles)	1	al	\$40,000.00	\$40,000.00
Bollard Lighting	33	ea	\$2,000.00	\$66,000.00
Pedestrian Pole Lighting (single)	34	ea	\$4,000.00	\$136,000.00
Interpretive Signage	1	al	\$10,000.00	\$10,000.00
			Subtotal	\$252,000.00

7 Irrigation

Irrigation	10,500	sf	\$1.00	\$10,500.00
			Subtotal	\$10,500.00

Sub total: \$2,197,518.56

10% General Conditions \$219,751.86

10% Construction Contingency \$219,751.86

Total: \$2,637,022.27

Stormwater Master Plan Design Fee \$30,000.00

12% Design Fee \$316,442.67

Total: \$2,983,464.94

Annual Maintenance Cost: \$104,421.27

Key:

ea - each
 sf/f - square foot of wall face
 lf - linear foot
 cy - cubic yard
 ls - lump sum
 sy - square yard
 sf - square foot
 N.I.C. - not in contract
 al - allowance
 Cal - caliper
 Ht - height

Area 'B' - Century Garden

1 Demolition and Earthwork

Item	Quantity	Unit	Unit Cost	Subtotal
General Demolition / Site Clearing / Site Prep	1	al	\$58,295.36	\$58,295.36
General Grading / Earthwork	1	al	\$11,346.75	\$11,346.75
Subtotal				\$69,642.11

2 Landscape

Item	Quantity	Unit	Unit Cost	Subtotal
Canopy Trees	16	3" Cal	\$300.00	\$4,800.00
Flowering Trees	10	2" Cal	\$200.00	\$2,000.00
Shrubs	100	ea	\$60.00	\$6,000.00
Planting Area (Perennials, Amended Topsoil, and Mulch)	7,500	sf	\$5.50	\$41,250.00
Turf Seed With Erosion Control	1,700	sy	\$1.25	\$2,125.00
Subtotal				\$56,175.00

3 Hardscape

Item	Quantity	Unit	Unit Cost	Subtotal
Concrete Walks	10,000	sf	\$5.00	\$50,000.00
Special Paving	11,850	sf	\$18.00	\$213,300.00
Pavilion Paving (standard 6" scored concrete)	625	sf	\$6.00	\$3,750.00
Concrete Bench Pads	112	sf	\$5.00	\$560.00
Concrete Stairs	195	lf	\$25.00	\$4,875.00
Railings	1	al	\$5,000.00	\$5,000.00
Curb and ADA Crosswalk Enhancements	1	al	\$10,000.00	\$10,000.00
Stone Veneer Seat Wall (2' ht.)	45	lf	\$353.00	\$15,885.00
Ballustrade	115	lf	\$380.00	\$43,700.00
Stone Veneer Retaining Wall (avg. 2' ht.)	125	lf	\$326.00	\$40,750.00
Stone Veneer Retaining Wall (avg. 4' ht.)	115	lf	\$405.00	\$46,575.00
Subtotal				\$434,395.00

4 Site Amenities

Item	Quantity	Unit	Unit Cost	Subtotal
Pergola	1	al	\$55,000.00	\$55,000.00
Pool Entrance Pavilion	1	al	\$80,000.00	\$80,000.00
Sculpture Plinth	1	al	\$15,000.00	\$15,000.00
Sculpture Installation Coordination	1	al	\$5,000.00	\$5,000.00
Up Lighting	1	al	\$5,000.00	\$5,000.00
Subtotal				\$160,000.00

5 Utilities / Infrastructure

Item	Quantity	Unit	Unit Cost	Subtotal
Bioretention Area, engineered soils, piping, excavation, and grading (if pervious pavement not used)	1	al	\$25,000.00	\$25,000.00
Subtotal				\$25,000.00

6 Miscellaneous

Item	Quantity	Unit	Unit Cost	Subtotal
Site Furniture (Benches, Tables, Trash Receptacles)	1	al	\$100,000.00	\$100,000.00
Planters at Brentwood	6	ea	\$9,500.00	\$57,000.00
Planters at Pergola	1	al	\$20,000.00	\$20,000.00
Interpretive Signage	1	al	\$10,000.00	\$10,000.00
Pedestrian Pole Lighting at Brentwood Entrance(quad)	2	ea	\$10,000.00	\$20,000.00
Pedestrian Pole Lighting (single)	12	ea	\$4,000.00	\$48,000.00
Subtotal				\$255,000.00

7 Irrigation

Irrigation	22,800	sf	\$1.00	\$22,800.00
Subtotal				\$22,800.00

Sub total: \$1,023,012.11

10% General Conditions	\$102,301.21
10% Construction Contingency	\$102,301.21
Total:	\$1,227,614.53

Key:
 ea - each
 sf/f - square foot of wall face
 lf - linear foot
 cy - cubic yard
 ls - lump sum
 sy - square yard
 sf - square foot
 N.I.C. - not in contract
 al - allowance
 Cal - caliper
 Ht - height

12% Design Fee	\$147,313.74
Total:	\$1,374,928.28

Annual Maintenance Cost: \$48,122.49

Area 'C' - Multi-purpose Facility

1 Demolition and Earthwork

General Demo and Grading for Service drive Realignment)	1	al	\$7,500.00	\$7,500.00
Subtotal			\$7,500.00	\$7,500.00

2 Landscape

Canopy Trees	30	3" Cal	\$300.00	\$9,000.00
Flowering Trees	22	2" Cal	\$200.00	\$4,400.00
Shrubs	150	ea	\$60.00	\$9,000.00
Planting Area (Perennials, Amended Topsoil, and Mulch)	10,200	sf	\$5.50	\$56,100.00
Turf Sod (disturbed areas)	1,944	sy	\$4.50	\$8,750.00
Subtotal			\$87,250.00	\$87,250.00

3 Hardscape

Concrete Walks (along tennis courts and service drive)	4,300	sf	\$5.00	\$21,500.00
Chat Paving with Structural Soil (century edge of facility)	3,000	sf	\$22.00	\$66,000.00
Asphalt Service Drive	14,800	sf	\$5.00	\$74,000.00
Stone Seat Wall at Tennis Nodes	50	lf	\$115.00	\$5,750.00
Subtotal			\$167,250.00	\$167,250.00

4 Miscellaneous

Site Furniture (Benches, Tables, Trash Receptacles)	1	al	\$100,000.00	\$100,000.00
Pedestrian Pole Lighting along Tennis Courts	9	ea	\$4,000.00	\$36,000.00
Subtotal			\$136,000.00	\$136,000.00

5 Irrigation

Irrigation	30,700	sf	\$1.00	\$30,700.00
Subtotal			\$30,700.00	\$30,700.00

Sub total: \$428,700.00

10% General Conditions \$42,870.00
10% Construction Contingency \$42,870.00

Total: \$514,440.00

12% Design Fee \$61,732.80

Ice Rink and Multi Use Facilities
(2013 info from Jacobs) \$10,850,000.00

Total: \$11,426,172.80

Annual Maintenance Cost: \$399,916.05

Key:

- ea - each
- sf/lf - square foot of wall face
- lf - linear foot
- cy - cubic yard
- ls - lump sum
- sy - square yard
- sf - square foot
- N.I.C. - not in contract
- al - allowance

Area 'D' General Park Wide Amenities

1 Miscellaneous

Item	Quantity	Unit	Unit Cost	Subtotal
Site Furniture (Benches, Tables, Trash Receptacles)	1	al	\$100,000.00	\$100,000.00
Wayfinding Signage	1	al	\$75,000.00	\$75,000.00
Wi-Fi system	1	al	\$45,000.00	\$45,000.00
Park Security Measures (cameras)	1	al	\$50,400.00	\$50,400.00
Pedestrian Pole Lighting (single)	64	ea	\$4,000.00	\$256,000.00
			Subtotal	\$526,400.00

Sub total: \$526,400.00

10% General Conditions \$52,640.00
 10% Construction Contingency \$52,640.00

Total: \$631,680.00

12% Design Fee \$75,801.60
Total: \$707,481.60

Annual Maintenance Cost: \$21,224.45

Key:

ea - each sy - square yard
 sf/f - square foot of wall face sf - square foot
 lf - linear foot N.I.C. - not in contract
 cy - cubic yard al - allowance
 ls - lump sum Cal - caliper
 Ht - height

Area 'E' - The Link

1 Demolition and Earthwork

Item	Quantity	Unit	Unit Cost	Subtotal
General Demolition / Site Clearing / Site Prep	1	al	\$53,690.28	\$53,690.28
General Grading / Earthwork	1	al	\$11,325.00	\$11,325.00
Landscape Berms (fill)	2,241	cy	\$40.00	\$89,629.63
			Subtotal	\$154,644.91

2 Landscape

Item	Quantity	Unit	Unit Cost	Subtotal
Canopy Trees	12	3" Cal	\$300.00	\$3,600.00
Flowering Trees	20	2" Cal	\$200.00	\$4,000.00
Shrubs	100	ea	\$60.00	\$6,000.00
Planting Area (Perennials, Amended Topsoil, and Mulch)	2,400	sf	\$5.50	\$13,200.00
Berm Planting (Perennials, Amended Topsoil, and Mulch)	20,750	sf	\$5.50	\$114,125.00
Turf Sod (disturbed areas)	1,656	sy	\$1.25	\$2,069.44
			Subtotal	\$142,994.44

3 Hardscape

Item	Quantity	Unit	Unit Cost	Subtotal
Concrete Walks (6' wide)	4,200	sf	\$5.00	\$21,000.00
Special Paving in Plaza	1,650	sf	\$14.00	\$23,100.00
Asphalt Paving with Striping	22,150	sf	\$5.00	\$110,750.00
			Subtotal	\$154,850.00

4 Site Amenities

Kiosk Signage	1	al	\$6,000.00	\$6,000.00
			Subtotal	\$6,000.00

5 Utilities / Infrastructure

Electrical Distribution	1	al	\$20,000.00	\$20,000.00
Bioretention	1	al	\$25,000.00	\$25,000.00
Storm Sewer System	1	al	\$10,000.00	\$10,000.00
			Subtotal	\$55,000.00

6 Miscellaneous

Site Furniture (Benches, Tables, Trash Receptacles)	1	al	\$20,000.00	\$20,000.00
Parking Lot Pole Lighting	5	ea	\$5,200.00	\$26,000.00
Pedestrian Pole Lighting (twin)	3	ea	\$5,100.00	\$15,300.00
Pedestrian Pole Lighting (single)	21	ea	\$4,000.00	\$84,000.00
			Subtotal	\$145,300.00

7 Irrigation

Irrigation	38,050	sf	\$1.00	\$38,050.00
			Subtotal	\$38,050.00

Sub total: \$696,839.35

10% General Conditions \$69,683.94
 10% Construction Contingency \$69,683.94

Total: \$836,207.22

12% Design Fee \$100,344.87
Total: \$936,552.09

Annual Maintenance Cost: \$23,413.80

Key:

ea - each sy - square yard
 sf/f - square foot of wall face sf - square foot
 lf - linear foot N.I.C. - not in contract
 cy - cubic yard al - allowance
 ls - lump sum Cal - caliper
 Ht - height

Area 'F' - Native Hillside Landscapes

1 Landscape

Interpretive Signage	1	al	\$10,000.00	\$10,000.00
Native Seed With Erosion Control (includes 3yr maintenance)	25,111	sy	\$9.25	\$232,277.78
Subtotal			\$242,277.78	

2 Irrigation

Irrigation (temporary during establishment)	1	al	\$10,000.00	\$10,000.00
Subtotal			\$10,000.00	

Sub total: \$252,277.78

10% General Conditions \$25,227.78

10% Construction Contingency \$25,227.78

Total: \$302,733.33

12% Design Fee \$36,328.00

Total: \$339,061.33

Annual Maintenance Cost: \$8,476.53

Key:

ea - each	sy - square yard
sf/f - square foot of wall face	sf - square foot
lf - linear foot	N.I.C. - not in contract
cy - cubic yard	al - allowance
ls - lump sum	Cal - caliper
	Ht - height

Area 'G' - Park Edge Improvements

1 Demolition and Earthwork

Item	Quantity	Unit	Unit Cost	Subtotal
General Demolition / Site Clearing / Site Prep	1	al	\$56,838.89	\$56,838.89
General Grading / Earthwork	1	al	\$11,300.00	\$11,300.00
Landscape Berms (fill)	152	cy	\$40.00	\$6,074.07
Subtotal			\$74,212.96	

2 Landscape

Canopy Trees	40	3" Cal	\$300.00	\$12,000.00
Flowering Trees	17	2" Cal	\$200.00	\$3,400.00
Planting Area (Perennials, Amended Topsoil, and Mulch)	4,500	sf	\$5.50	\$24,750.00
Turf Sod	2,889	sy	\$4.50	\$13,000.00
Subtotal			\$53,150.00	

3 Hardscape

Concrete Walks (6' wide)	10,100	sf	\$5.00	\$50,500.00
Special Paving at Entry Nodes	1,400	sf	\$14.00	\$19,600.00
Living Wall Retaining Wall System (irrig., plants, maintenance)	3,200	sf/f	\$37.00	\$118,400.00
Subtotal			\$188,500.00	

4 Utilities / Infrastructure

Utility Structure	1	al	\$20,000.00	\$20,000.00
Subtotal			\$20,000.00	

5 Miscellaneous

Site Furniture (Benches, Tables, Trash Receptacles)	1	al	\$40,000.00	\$40,000.00
Kiosk Signage	1	al	\$12,000.00	\$12,000.00
Entry Signs	1	al	\$25,000.00	\$25,000.00
Tennis Belvedere Shade Structures	2	ea	\$12,000.00	\$24,000.00
Bollard Lighting	9	ea	\$2,000.00	\$18,000.00
Roadway Pole Lighting Along Brentwood	10	ea	\$5,200.00	\$52,000.00
Pedestrian Pole Lighting (quad)	1	ea	\$10,000.00	\$10,000.00
Pedestrian Pole Lighting (twin)	5	ea	\$5,100.00	\$25,500.00
Pedestrian Pole Lighting (single)	46	ea	\$4,000.00	\$184,000.00
Subtotal			\$390,500.00	

6 Irrigation

Irrigation	30,500	sf	\$1.00	\$30,500.00
Subtotal			\$30,500.00	

Sub total: \$756,862.96

10% General Conditions \$75,686.30

10% Construction Contingency \$75,686.30

Total: \$908,235.56

12% Design Fee \$108,988.27

Total: \$1,017,223.82

Annual Maintenance Cost: \$25,430.60

Key:

ea - each	sy - square yard
sf/f - square foot of wall face	sf - square foot
lf - linear foot	N.I.C. - not in contract
cy - cubic yard	al - allowance
ls - lump sum	Cal - caliper
	Ht - height

Area 'H' - Pond Amenities

1 Demolition and Earthwork

Item	Quantity	Unit	Unit Cost	Subtotal
General Demolition / Site Clearing / Site Prep	1	al	\$7,094.72	\$7,094.72
General Grading / Earthwork	1	al	\$3,137.50	\$3,137.50
			Subtotal	\$10,232.22

2 Landscape

Canopy Trees	6	3" Cal	\$300.00	\$1,800.00
Flowering Trees	6	2" Cal	\$200.00	\$1,200.00
Shrubs	50	ea	\$60.00	\$3,000.00
Planting Area (Perennials, Amended Topsoil, and Mulch)	2,600	sf	\$5.50	\$14,300.00
Turf Seed With Erosion Control	617	sy	\$1.25	\$770.83
			Subtotal	\$21,070.83

3 Hardscape

Concrete Walks (6' wide)	4,200	sf	\$5.00	\$21,000.00
Special Paving in outdoor classroom	200	sf	\$14.00	\$2,800.00
Landscape Boulders	50	ea	\$175.00	\$8,750.00
			Subtotal	\$32,550.00

4 Site Amenities

Bridge Feature to Pond Island	1	al	\$26,000.00	\$26,000.00
Council Circle	1	al	\$12,700.00	\$12,700.00
Soft Surfacing with Underdrain	1	al	\$15,000.00	\$15,000.00
Interpretive Signage	1	al	\$10,000.00	\$10,000.00
Playground Upgrades/Improvements	1	al	\$250,000.00	\$250,000.00
Discovery Dock (water edge access)	1	al	\$10,000.00	\$10,000.00
			Subtotal	\$323,700.00

5 Utilities / Infrastructure

Bioretention Area, engineered soils, piping, excavation, and grading (if pervious pavement not used)	1	al	\$25,000.00	\$25,000.00
			Subtotal	\$25,000.00

6 Miscellaneous

Site Furniture (Benches, Tables, Trash Receptacles)	1	al	\$15,000.00	\$15,000.00
Interpretive Signage	1	al	\$10,000.00	\$10,000.00
Security lighting for Teen Area	1	al	\$20,000.00	\$20,000.00
Pedestrian Pole Lighting (single)	6	ea	\$4,000.00	\$24,000.00
			Subtotal	\$69,000.00

7 Irrigation

Irrigation	8,150	sf	\$1.00	\$8,150.00
			Subtotal	\$8,150.00

Sub total: \$489,703.06

10% General Conditions \$48,970.31
10% Construction Contingency \$48,970.31

Total: \$587,643.67

12% Design Fee \$70,517.24
Total: \$658,160.91

Annual Maintenance Cost: \$16,454.02

Key:

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sf/f - square foot of wall face
lf - linear foot
cy - cubic yard
ls - lump sum
sy - square yard
sf - square foot
N.I.C. - not in contract
al - allowance
Cal - caliper
Ht - height

Area 'I' - Promenade and Strolling Garden

1 Demolition and Earthwork

Item	Quantity	Unit	Unit Cost	Subtotal
General Demolition / Site Clearing / Site Prep	1	al	\$47,708.61	\$47,708.61
General Grading / Earthwork	1	al	\$6,500.00	\$6,500.00
			Subtotal	\$54,208.61

2 Landscape

Canopy Trees	12	3" Cal	\$300.00	\$3,600.00
Flowering Trees	16	2" Cal	\$200.00	\$3,200.00
Sod (disturbed areas, 10' each side)	2,533	sy	\$4.50	\$11,400.00
Node Plantings	3,200	sf	\$8.00	\$25,600.00
			Subtotal	\$43,800.00

3 Hardscape

Concrete Promenade Walk (Exposed Aggregate)	13,850	sf	\$8.00	\$110,800.00
Concrete Curb/Header Both Sides of Promenade	2,400	lf	\$36.00	\$86,400.00
Special Paving at Nodes	4,500	sf	\$14.00	\$63,000.00
Concrete Bench Pads	640	sf	\$5.00	\$3,200.00
Curb and ADA Crosswalk Enhancements	1	al	\$10,000.00	\$10,000.00
Stone Veneer Seat Walls at Nodes (2' Ht.)	250	lf	\$353.00	\$88,250.00
			Subtotal	\$361,650.00

4 Site Amenities

Pergola	1	al	\$25,000.00	\$25,000.00
			Subtotal	\$25,000.00

5 Utilities / Infrastructure

Electrical Distribution	1	al	\$15,000.00	\$15,000.00
Drinking Fountain at Pavilion	1	al	\$7,500.00	\$7,500.00
			Subtotal	\$22,500.00

6 Miscellaneous

Site Furniture (Benches, Tables, Trash Receptacles)	1	al	\$50,000.00	\$50,000.00
Interpretive Signage	1	al	\$10,000.00	\$10,000.00
Pedestrian Pole Lighting (single)	30	ea	\$4,000.00	\$120,000.00
			Subtotal	\$180,000.00

7 Irrigation

Irrigation	26,000	sf	\$1.00	\$26,000.00
			Subtotal	\$26,000.00

Sub total: \$713,158.61

10% General Conditions \$71,315.86

10% Construction Contingency \$71,315.86

Total: \$855,790.33

12% Design Fee \$102,694.84

Total: \$958,485.17

Annual Maintenance Cost: \$33,546.98

Key:

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cy - cubic yard
ls - lump sum
sy - square yard
sf - square foot
N.I.C. - not in contract
al - allowance
Cal - caliper
Ht - height

Area 'J' - South Parking and Picnic Hill

1 Demolition and Earthwork

Item	Quantity	Unit	Unit Cost	Subtotal
General Demolition / Site Clearing / Site Prep	1	al	\$22,484.31	\$22,484.31
General Grading / Earthwork	1	al	\$3,587.50	\$3,587.50
			Subtotal	\$26,071.81

2 Landscape

Canopy Trees	18	3" Cal	\$300.00	\$5,400.00
Flowering Trees	3	2" Cal	\$200.00	\$600.00
Shrubs	50	ea	\$60.00	\$3,000.00
Planting Area (Perennials, Amended Topsoil, and Mulch)	2,200	sf	\$5.50	\$12,100.00
Raingarden (Perennials and Mineral Mulch)	3,300	sf	\$7.50	\$24,750.00
Sod Disturbed Areas	983	sy	\$4.50	\$4,425.00
			Subtotal	\$50,275.00

3 Hardscape

Concrete Curbs	975	lf	\$18.00	\$17,550.00
Special Paving at Trail head / Drop-off	1,235	sf	\$14.00	\$17,290.00
Asphalt Paving with Striping	9,500	sf	\$5.00	\$47,500.00
Stone Seat Blocks (18"x18")	275	lf	\$225.00	\$61,875.00
			Subtotal	\$144,215.00

4 Utilities / Infrastructure

Bioretention Area, engineered soils, piping, excavation, and grading (if pervious pavement not used)	1	al	\$35,000.00	\$35,000.00
			Subtotal	\$35,000.00

5 Miscellaneous

Site Furniture (Benches, Tables, Trash Receptacles)	1	al	\$35,000.00	\$35,000.00
Parking Lot Pole Lighting at expanded turnaround	2	ea	\$5,200.00	\$10,400.00
Pedestrian Pole Lighting at Drop-off and Park Entries	10	ea	\$4,000.00	\$40,000.00
			Subtotal	\$85,400.00

6 Irrigation

Irrigation	14,350	sf	\$1.00	\$14,350.00
			Subtotal	\$14,350.00

Sub total: \$355,311.81

10% General Conditions \$35,531.18

10% Construction Contingency \$35,531.18

Total: \$426,374.17

12% Design Fee \$51,164.90

Total: \$477,539.07

Annual Maintenance Cost: \$11,938.48

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 sf - square foot
 N.I.C. - not in contract
 al - allowance
 Cal - caliper
 Ht - height

Area 'K' - Stream and Lower Pond

1 Demolition and Earthwork

Item	Quantity	Unit	Unit Cost	Subtotal
General Demolition / Site Clearing / Site Prep	1	al	\$23,408.33	\$23,408.33
General Grading / Earthwork	1	al	\$12,705.56	\$12,705.56
			Subtotal	\$36,113.89

2 Landscape

Canopy Trees	8	3" Cal	\$300.00	\$2,400.00
Flowering Trees	6	2" Cal	\$200.00	\$1,200.00
Shrubs	200	ea	\$60.00	\$12,000.00
Planting Area (Perennials, Amended Topsoil, and Mulch)	18,400	sf	\$5.50	\$101,200.00
Aquatic Plantings	4,500	sf	\$4.50	\$20,250.00
Turf Seed With Erosion Control (disturbed areas)	1,722	sy	\$1.25	\$2,152.78
			Subtotal	\$139,202.78

3 Hardscape

Landscape Boulders	250	ea	\$175.00	\$43,750.00
			Subtotal	\$43,750.00

4 Site Amenities

Stream Crossings	7	ea	\$10,000.00	\$70,000.00
Promenade Stream	1	al	\$1,700,500.00	\$1,700,500.00
Promenade Stream Mechanical	1	al	\$75,000.00	\$75,000.00
Pond Grading and Liner	1	al	\$60,000.00	\$60,000.00
Pond Fountain and Aerator	1	al	\$10,000.00	\$10,000.00
Boardwalk Feature Along Promenade	675	sf	\$75.00	\$50,625.00
			Subtotal	\$1,966,125.00

5 Utilities / Infrastructure

Forebay	1	al	\$30,000.00	\$30,000.00
Electrical Distribution	1	al	\$25,000.00	\$25,000.00
Water Service Connection	1	al	\$5,000.00	\$5,000.00
15" Storm Sewer Extension	1	al	\$13,000.00	\$13,000.00
Overflow Structure	1	al	\$50,000.00	\$50,000.00
42" Storm Sewer Relocation	1	al	\$35,000.00	\$35,000.00
			Subtotal	\$158,000.00

6 Miscellaneous

Interpretive Signage	1	al	\$10,000.00	\$10,000.00
			Subtotal	\$10,000.00

7 Irrigation

Irrigation	33,900	sf	\$1.00	\$33,900.00
			Subtotal	\$33,900.00

Sub total: \$2,387,091.67

10% General Conditions \$238,709.17

10% Construction Contingency \$238,709.17

Total: \$2,864,510.00

12% Design Fee \$343,741.20

Total: \$3,208,251.20

Annual Maintenance Cost: \$112,288.79

Key:

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 Ht - height

Grand Totals

Phase		Total
A	Brentwood and Forsyth Entry Invitation - Construction Total	\$2,983,464.94
	Annual Maintenance After Establishment	\$104,421.27
B	Century Garden - Construction Total	\$1,374,928.28
	Annual Maintenance After Establishment	\$48,122.49
C	Multi-purpose Facility - Construction Total	\$11,426,172.80
	Annual Maintenance After Establishment	\$399,916.05
D	General Park Wide Amenities - Construction Total	\$707,481.60
	Annual Maintenance After Establishment	\$21,224.45
E	The Link - Construction Total	\$936,552.09
	Annual Maintenance After Establishment	\$23,413.80
F	Native Hillside Landscapes - Construction Total	\$339,061.33
	Annual Maintenance After Establishment	\$8,476.53
G	Park Edge Improvements - Construction Total	\$1,017,223.82
	Annual Maintenance After Establishment	\$25,430.60
H	Pond Amenities - Construction Total	\$658,160.91
	Annual Maintenance After Establishment	\$16,454.02
I	Promenade and Strolling Garden - Construction Total	\$958,485.17
	Annual Maintenance After Establishment	\$33,546.98
J	South Parking and Picnic Hill - Construction Total	\$477,539.07
	Annual Maintenance After Establishment	\$11,938.48
K	Stream and Lower Pond - Construction Total	\$3,208,251.20
	Annual Maintenance After Establishment	\$112,288.79

Construction Grand Total \$24,087,321.21

Annual Maintenance Grand Total \$805,233.46

Key:
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 sy - square yard
 sf - square foot
 N.I.C. - not in contract
 al - allowance
 Cal - caliper
 Ht - height





CONCLUSION AND NEXT STEPS

Shaw Park is a treasure of the Clayton community. Strong public and private support have kept the park thriving over the past 75 years and more support will be needed to maintain the park’s excellent reputation. This overlay plan will serve as a guide for future park improvements and support further development of public-private partnerships. The plan addresses realistic expectations for priority phasing and is intended to be a road map for improvements over the next ten years. With the implementation of this overlay plan, Shaw Park will remain a center for activity and an oasis of tranquility in the urban fabric of the City of Clayton.

